

Computer Engineering B.S. - 4 Year Degree Plan

2025-2026

Lamar University's **Bachelor of Science in Computer Engineering** focuses on technological innovation, shaping the future across industries in various fields that include embedded hardware and software systems, computer networks and cybersecurity, robotics, machine learning and artificial intelligence, signal processing, etc. You will have opportunities to collaborate with distinguished faculty, engage in cutting-edge research and develop skills that will prepare you to become leaders and innovators in the field of computer engineering.

NOTE: Degree plans may change over a four-year period. This may not be the most current list of course requirements for your program. It is always advised that you check Degree Audit in Banner Self-Serv or your advisor for the most up-to-date degree requirements and to track your progress toward a degree.

| FIRST YEAR | Fall | | Hours | Grade | Spring | | Hours | Grade |
|-------------|--------------------------------|---|-------|-------|------------------------|--|-------|-------|
| | MATH 2413 | Calculus and Analytical Geometry I | | | MATH 2414 | Calculus and Analytical Geometry II | | |
| | CHEM 1311 and CHEM 1111 | General Chemistry I and Gen Chem I Lab | 4 | | ENGL 1301 | Composition I | 3 | |
| | ELEN 1100 | Introduction to ECE | 1 | | PHYS 2425 | University Physics I | 4 | |
| | Social and Behavioral Sciences | | 3 | | History Elective | | 3 | |
| | Communication Core | | 3 | | ELEN 1301 | Computers and Programming I | | |
| | Hours | | 15 | | Hours | | 14 | |
| SECOND YEAR | Fall | | Hours | Grade | Spring | | Hours | Grade |
| | MATH 2415 | Calculus III | 4 | | MATH 2320 | Ordinary Differential Equations | 3 | |
| | MATH 2318 | Linear Algebra | 3 | | COSC 2375 or MATH 3321 | Discrete Structures or Discrete Structures | 3 | |
| | PHYS 2426 | University Physics II | 4 | | ELEN 2411 | Circuits Analysis I | 4 | |
| | INEN 3320 or MATH 3370 | Probability and Statistics for Engineering or Intro to the Theory of Stat Inference | 3 | | ELEN 3431 | Digital System Design I | 4 | |
| | PHIL 1370 | Philosophy of Knowledge | 3 | | ELEN 2301 | Computers and Programming II | 3 | |
| | Hours | | 17 | | Hours | | 17 | |
| THIRD YEAR | Fall | | Hours | Grade | Spring | | Hours | Grade |
| | ELEN 3421 | Electronics I | 4 | | ELEN 3340 | Digital Integrated Circuits | 3 | |
| | ELEN 3320 | Computer Networks | 3 | | ELEN 3313 | Signals, Systems and Transforms | 3 | |
| | ELEN 4486 | Embedded Microprocessor Systems | 4 | | ELEN 3451 | Digital System Design II | 4 | |
| | ELEN 3330 | Operating Systems | 3 | | ELEN 4387 | Computer Organization and Architecture | 3 | |
| FOURTH YEAR | POLS 2301 | Intro to American Government I | 3 | | POLS 2302 | Intro/American Government II | 3 | |
| | Hours | | 17 | | Hours | | 16 | |
| | Fall | | Hours | Grade | Spring | | Hours | Grade |
| | ELEN 4306 | Senior Project Design I | 3 | | ELEN 4307 | Senior Project Design II | 3 | |
| | ELEN 4314 | Fundamentals of Digital Signal Processing | 3 | | ELEN Elective | | 6 | |
| | ELEN Elective | | 3 | | History Elective | | 3 | |
| | Fine Arts Core | | 3 | | | | | |
| | Hours | | 12 | | Hours | | 12 | |